

201-14319



NCIC HPV
Sent by: Mary-Beth
Weaver

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To: NCIC HPV, Jodi Burgess/DC/USEPA/US@EPA
cc:
cc:
Subject: Environmental Defense comments on Melamine, Hexakis-
(Methoxymethyl) (CASRN 3089-11-0)



Richard_Denison@environmentaldefense.org on 03/03/2003 03:38:32 PM

To: oppt.ncic@epamail.epa.gov, hpv.chemrtk@epamail.epa.gov, Rtk Chem/DC/USEPA/US@EPA, Karen
Boswell/DC/USEPA/US@EPA, krhyne@kslaw.com
cc: MTC@mchsi.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org

Subject: Environmental Defense comments on Melamine, Hexakis- (Methoxymethyl) (CASRN 3089-11-0)

(Submitted via Internet 3/3/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and krhyne@kslaw.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Melamine, Hexakis- (Methoxymethyl) (CASRN 3089-11-0), also known as Hexamethoxymethylmelamine (HMMM).

The Hexamethoxymethylmelamine Coalition, consisting of Borden Chemical and Cytec Industries, the producers of HMMM, and Solutia Inc., a manufacturer of products containing HMMM, has submitted a Robust Summary/Test Plan for this chemical under the EPA HPV Challenge Program. HMMM cannot be tested in pure form because it does not exist in pure form. It is a crosslinking resin used in thermoset coatings such as beverage can coatings and automotive paint finishes, and may be present in these products at 28-50% of the product weight prior to polymerization. According to the sponsors, consumer exposure to HMMM is expected to be minimal to non-existent because the polymerization process is essentially complete in consumer product applications. The sponsors also maintain that occupational exposure is minimal and limited to quality control personnel.

Because HMMM does not exist in pure form, physical/chemical characteristics of this chemical were calculated, as were some of the data for its environmental fate. These calculations indicate HMMM would concentrate in soil, and to a lesser extent in water, rather than in the atmosphere. Calculations indicate it would not be expected to persist in the atmosphere, with an estimated half-life of only a few minutes in sunlight. Data for hydrolysis are not available and the Test Plan calls for these studies to be conducted.

The Test Plan provides an excellent summary of the toxicological data presented in the Robust Summary. Data describing the acute toxicity of HMMM are somewhat variable, but provide reasonable assurance that it has low toxicity, with all studies indicating LD50 values in excess of 1000 mg/kg. The only positive genotoxicity results were suggestive in nature: HMMM induced chromosomal aberrations in CHO cells; however, these results were countered by the fact that HMMM did not induce chromosomal aberrations in vivo.

With the exception of Developmental and Reproductive Toxicity, other required SIDS elements are adequately addressed by studies described in the Robust Summary. The Test Plan calls for studies of Developmental and Reproductive Toxicity to be conducted, and we agree these are needed.

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In summary, this submission is a very acceptable Robust Summary/Test Plan that provides a good description of available data and proposes to conduct those studies necessary to address the remaining SIDS elements. Most of the studies and calculations described are recent and conducted under GLP or in the spirit of GLP. Some of the older studies of acute toxicity and skin or eye irritation were done prior to the development of GLP, but we have no reason to believe they are not good studies.

Thank you for this opportunity to comment.

Hazel B. Matthews, Ph.D.
Consulting Toxicologist, Environmental Defense

Richard Denison, Ph.D.
Senior Scientist